

Quiz 3

1. Determine whether the sequence converges or diverges. If the sequence converges, find the limit. Show all of your work.

(a) $\left\{ \left(-\frac{1}{5} \right)^n \right\}$

(b) $\left\{ \frac{2^n}{1+n} \right\}$

2. Convert the equations from polar form to rectangular/Cartesian form, or vice versa.

(a) $\theta = \pi/4$ (convert to rectangular/Cartesian)

(b) $x^2 + y^2 = 9$ (convert to polar)